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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,221	06/20/2001	Alan E. Moorman	C-2805/5 (PHA 4166.5)	3271
321	7590	01/28/2004	EXAMINER	
SENNIGER POWERS LEAVITT AND ROEDEL ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			KUMAR, SHAILENDRA	
		ART UNIT	PAPER NUMBER	
		1621		

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/885,221	MOORMAN ET AL.
	Examiner	Art Unit
	SHAILENDRA - KUMAR	1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 13 November 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1,2,22,25 and 31-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,22,25 and 31-39 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are:--a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

## DETAILED ACTION

This office action is in response to applicants' communication filed in paper # 12, on 11/13/03.

Claims 1-2, 22, 25, 31-32 and newly added claims 33-39 are pending in this application. Rejection of claims 1-22, 22, 25, and 31-32 under obvious type double patenting over US 5,945,425 is hereby withdrawn, as the terminal disclaimer has already been received, and accepted.

### ***Claim Rejections - 35 USC § 112***

1. Claims 1-2, 22, 25, and 31-32 are again rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for certain benzimidazoles, does not reasonably provide enablement for millions of sulfur containing compounds. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims. As set forth in paper # 10, In re Wands factors must be considered, to assess whether claims are enabled with respect to the scope of the claims.

Applicants' arguments were fully considered and were not found convincing. Applicants allege that specification details **numerous embodiments** of sulfur containing compounds and at the same time point out to the general formulas I, II, or III, which according to the examiner, belongs to **a single class** of benzimidazoles containing sulfur compounds. All 300 examples, applicants are alleging to be different class of compounds, in fact belong to **none other than a single** benzimidazoles class of compounds. All 100 examples belong to **a single benzimidazoles** class of

compounds. That means applicants have but experimented **one class** of compounds that have both a (H+/K+) ATPase and a herpetoviridae protease activity. There are myriads of other sulfur containing compounds that need to be tested for the functionality as claimed herein, and this is so called the undue experimentation. As regards to the amount of the direction, applicants have provided only one direction towards **a single class** of benzimidazoles compounds among millions of other sulfur containing compounds. With regard to the nature of the invention, only **a single class** of benzimidazoles has been screened, and with respect to the working examples, the examiner did not see any other class of compounds other than **benzimidazoles**. This is clearly enabled for **a single and sole class of benzimidazoles** only. Clearly breadth of the claims is simply not acceptable especially when only single class of compounds have been tested whereas, myriads of sulfur containing compounds have been claimed. Same can be said about "level of predictability" and "quantity of experimentation".

#### ***Claim Rejections - 35 USC § 102***

2. Claims 1-2, 22, 25 and 31-32 are again, and likewise newly added claims 33-39 are rejected under 35 U.S.C. 102(b) as being anticipate by EP'217, for the reasons as set forth in paper no. 10.

Applicants' arguments were not found convincing. Applicants argue that the reference neither suggest nor disclose dual functions of (H+/K+) ATPase and herpetoviridae as required by claims. Inasmuch as the compounds are sulfur containing benzimidazole class of compounds (same class as discloses in the specification in herein), the claims are anticipated, as the functional property is inherent to the

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compounds. Note, treatment of herpetoviridae using sulfur containing compound and especially, benzimidazole class of compound is clearly taught in the reference, see page 5, line 6, and page 40, example 30.

***Claim Rejections - 35 USC § 103***

3. Claims 1-2, 22, 25 and 31-32 are again and likewise, newly added claims 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over combined teachings of Lindberg et al and EP'217, all for the reasons of record.

Applicants' arguments were fully considered and were not found persuasive.

Applicants allege that Lindberg disclose different functionality of the (H+/K+) ATPase inhibiting of benzimidazoles class of compounds, and do not teach treatment of herpetoviridae infection. The examiner does not dispute that, but then, same benzimidazoles, in the EP'217 teach that they can be used in the treatment of herpetoviridae, and does not suggest the two functionality, which are inherent to the compounds, and also taught in Lindberg, and hence clearly a *prima facie* case of obviousness has been established. There is motivation, and the motivation is that structurally similar compound can be used to treat herpetoviridae infection and the two functionality is inherent to the compound. Applicants have indeed found a new property of the old compound, which was already used in the treatment of herpetoviridae infection, see EP'217.

No claim is allowed.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAILENDRA - KUMAR whose telephone number is 703-308-4519. The examiner can normally be reached on Mon-Thur 8:00-5:30, Alt Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 703-308-4532. The fax phone number for the organization where this application or proceeding is assigned is 703-308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



SHAILENDRA - KUMAR  
Primary Examiner  
Art Unit 1621

S.Kumar  
1/27/04